

WHAT IS CLAIMED IS:

1. An information distribution service system comprising a plurality of mobile information terminals, a computer system and a plurality of information-provider terminals wherein said mobile information terminals, said computer system and said information-provider terminals are connected to each other by a communication network,

wherein said computer system predicts a mobile information terminal's moving destination and moving direction by inferring said mobile-information terminal's location displacements along the time series on the basis of information on locations of said mobile information terminal including a pre-registered information category whose information distribution service, distribution and notification are desired, and on the basis of an inference formula provided in advance with said mobile information terminal's moving direction and location; and

said computer system determines an information-provider terminal predicted to exist at said predicted moving destination of said mobile information terminal on the basis of locations of information-provider terminals pre-recording plans to distribute information as a notification, and determines distributed and reported information corresponding to an information category

registered in advance by said mobile information terminal among pieces of information to be provided by said selected information-provider terminal.

2. An information distribution service system according to claim 1, wherein said computer system is provided with an inference formula for predicting a moving direction for each geographical position with said geographical position taken as an origin on the basis of map information; and

said computer system, if existence at an origin to which an inference formula is applied is confirmed on the basis of information on locations of said mobile information terminal, infers prediction of said mobile information terminal's moving destination and moving direction on the basis of said inference formula.

3. An information distribution service system according to claim 1, wherein each of a plurality of said inference formulas is defined on the basis of map information having a plurality of scale factors.

4. An information distribution service system according to claim 1, wherein said computer system executes the steps of:

regarding said defined inference formula as an equation representing a regression straight line;

finding a distance between a location represented by said reference formula and the location of said information-provider terminal by adoption of a least-square method; and

determining that an information-provider terminal exists in the vicinity of said predicted moving destination of said mobile information terminal if said distance is within an allowable range determined for said defined inference formula.

5. An information distribution service system according to claim 1, wherein said computer system forms a judgment as to whether or not an inference formula defined on the basis of information on locations of said mobile information terminal is proper and, if said defined inference formula is found improper, a new inference formula is defined.

6. An information distribution service system according to claim 1, wherein if it is impossible to determine an inference formula for predicting said mobile information terminal's moving direction and location from location displacements of said mobile information terminal with each geographical position used as an origin on the basis of map information, said computer system finds an inference formula for predicting said

mobile information terminal's most recent moving destination and most recent moving direction each time most recent information on a location of said mobile information terminal is obtained.

7. An information distribution service system according to claim 1, wherein if an inference formula, which is found as an equation for predicting said mobile information terminal's moving destination and moving direction each time most recent information on a location of said mobile information terminal is obtained, changes very frequently in a time series, said computer system predicts a polarity of a movement of said mobile information terminal by application of a partial derivative and on the basis of said mobile information terminal's location information accumulated in the past.

8. An information distribution service system according to claim 1, wherein if said mobile information terminal makes an urgent request for information on a place in an area at which said mobile information terminal is currently located, said computer system transmits said information based on most recent information on a location of said mobile information terminal.

9. An information distribution service system

according to claim 1, wherein said computer system executes the steps of:

informing a mobile-communication operator of information on a mobile information terminal moving to a location at a place in an area at and/or in said mobile information terminal's moving destination and/or moving direction predicted on the basis of an inference formula defined from information on locations of said mobile information terminal;

finding a moving speed of said mobile information terminal from location information accumulated in the past;

informing an information-provider terminal inferred to be a terminal located at said mobile information terminal's moving destination of an expected time of arrival of said mobile information terminal at said moving destination where said expected time of arrival is a time predicted by using an inference formula based on a present location of said mobile information terminal;

determining moving means, on which a user of said mobile information terminal is riding, from a combination of said mobile information terminal's moving speed and displacements in location information; and

informing said mobile-information terminal of

operational information obtained from an enterprise managing operations of said moving means.

10. An information distribution service system according to claim 1, wherein said computer system receives a response to information transmitted to said mobile information terminal as a notification from said mobile information terminal and records, separates as well as analyzes said response.

11. An information distribution service system according to claim 1, wherein said computer system informs said information-provider terminal of a result of an analysis of said response by said mobile information terminal.

12. An information distribution service system according to claim 1, wherein said computer system carries out a statistical analysis to improve a priority order of distributed notifications, contents of information and inference precision on the basis of a response by said mobile information terminal, attributes and category information, which have been registered by the user, and contents of a notification distributed by said information-provider terminal.